

WHAT IS CLAIMED IS:

1. A method of determining a confidence score for decoding of a speech input by a speech recognition engine, in which the engine decodes the speech input using a grammar comprising a plurality of phonemes, the method comprising:

receiving an ordered string of phonemes, wherein the phonemes of the string are identified by a speech recognition engine as being part of a speech input, wherein each phoneme is associated with a time frame, and wherein the speech input spans a time period comprising a plurality of time frames;

receiving a phoneme acoustic score map, wherein the map comprises an acoustic score for each phoneme of a grammar at each of the plurality of time frames;

determining a score for a best path for the ordered string of phonemes.

2. The method of Claim 1, wherein the best path comprises a sequence of time frames ordered in the same manner as the order of the phonemes in the ordered string of phonemes.

3. The method of Claim 1, wherein the best path is a particular path from among a plurality of permissible paths having the highest sum of acoustic scores of the phonemes in the particular path.

4. The method of Claim 1, further comprising obtaining a first sum comprising the addition of the highest acoustic scores in each of the time frames.

5. The method of Claim 4, further comprising obtaining a second sum comprising the addition of the lowest scores in each of the time frames.

6. The method of Claim 5, further comprising determining a confidence score as a weighted average based at least in part on a functional relationship between the best path score, the second sum, and the first sum.

7. The method of Claim 1, wherein the grammar comprises a plurality of phrases, each phrase comprising a string of phonemes.

8. The method of Claim 7, further comprising determining a confidence score for each of the phrases of the grammar, wherein the phrases are grouped into concepts, at least one of the concepts comprising the ordered string of phonemes.

9. The method of Claim 8, further comprising comparing the confidence score for each of the phrases of the concepts not comprising the ordered string of phonemes against the confidence score of the ordered string of phonemes.

10. The method of Claim 9, wherein the confidence score of the ordered string of phonemes is reduced if the confidence score of one of the phrases of the concepts not comprising the ordered string is greater or equal to the confidence score of the ordered string.

11. A method of assigning a confidence score to a speech recognizer's decoding of a speech input, wherein the speech recognizer employs a grammar comprising a plurality of phonemes, wherein different combinations of the phonemes comprise phrases, and wherein the speech input spans a time period comprising a plurality of time frames, the method comprising:

creating a phoneme acoustic score map, wherein the map comprises an acoustic score for each phoneme of the grammar, and wherein each phoneme has an acoustic score for each of the time frames;

determining an arrangement of phonemes, associated with the speech input, in consecutive frames that yields the highest overall acoustic score, wherein the phonemes associated with the speech input form a phrase; and

normalizing a best path score based on one or more measures of the acoustic scores of the map.

12. The method of Claim 11, further comprising selecting a path from among multiple permissible paths that maximizes the sum of the acoustic scores of the phonemes associated with the speech input.

13. The method of Claim 11, wherein the one or more measures comprises at least one of a sum of the highest acoustic scores for each time frame and the sum of the lowest acoustic scores for each time frame.

14. The method of Claim 11, further comprising computing a best path score for each of a plurality of phrases, wherein each of the phrases comprises a combination of phonemes of the grammar.

15. The method of Claim 11, further comprising reducing the best path score if a best path score of the other phrases is substantially close to the best path score.